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                 resulting in a closer connection to BABS
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         AUG 27
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                 BIOTECHABS/BIOTECHDS: Two new display fields added for legal
         AUG 27
NEWS
                 status data from INPADOC
                 INPADOC: New family current-awareness alert (SDI) available
         SEP 01
NEWS
     9
                 New pricing for the Save Answers for SciFinder Wizard within
         SEP 01
NEWS 10
                 STN Express with Discover!
                 New display format, HITSTR, available in WPIDS/WPINDEX/WPIX
         SEP 01
NEWS 11
                 STN Patent Forum to be held October 13, 2004, in Iselin, NJ
NEWS 12
         SEP 14
                 STANDARDS will no longer be available on STN
         SEP 27
NEWS 13
                 SWETSCAN will no longer be available on STN
NEWS 14
         SEP 27
              JULY 30 CURRENT WINDOWS VERSION IS V7.01, CURRENT
NEWS EXPRESS
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              AND CURRENT DISCOVER FILE IS DATED 11 AUGUST 2004
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5 L2 AND L4

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ANSWER 1 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2004:120971 CAPLUS

DOCUMENT NUMBER:

140:177318

TITLE: Plant genes for sequence homologs of phytol

kinase of tocopherol biosynthesis and their use in

engineering plant tocopherol profiles and

drought resistance

INVENTOR(S):

Norris, Susan R.; Lincoln, Kim; Abad, Mark Scott; Eilers, Robert; Hartsuyker, Karen Kindle; Hirschberg, Joseph; Karunanandaa, Balasulojini; Moshiri, Farhad; Stein, Joshua C.; Valentin, Henry E.; Venkatesh,

Tyamagondlu V.

PATENT ASSIGNEE(S):

SOURCE:

Monsanto Technology, Llc, USA; et al.

PCT Int. Appl., 189 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

| PATENT NO | | KIN | D : | DATE | | APPLICATION NO. | | | | | | DATE | | | |
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| WO 200401 | .3312 | | A2 | | 2004 | 0212 | 1 | WO 2 | 003-1 | US25: | 276 | | 2 | 0030 | 805 |
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                                           US 2003-634548
                               20040304
    US 2004045051
                        A1
                                                             P 20020805
                                           US 2002-400689P
PRIORITY APPLN. INFO.:
                                                             A 20030805
                                           US 2003-634548
    A gene involved in the phosphorylation of tocopherols is identified in
    Arabidopsis thaliana and sequence homologs are identified in other
    plants. The gene may be useful in altering patterns of tocopherol
    biosynthesis in plants in the generation of novel secondary
    metabolites (no data.) and in the improvement plant resistance
    to drought stress. The gene was first identified by a mutation in the
    LTT1 gene leading to accumulation of phytols in Arabidopsis. Expression
    of the cloned gene in soybean led to changes in the tocopherol profile of
     seeds.
    ANSWER 2 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
                        2003:610132 CAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                        139:175849
                        Plant genes for sequence homologs of
TITLE:
                        methyltransferases of tocopherol biosynthesis and
                        their use in engineering plant tocopherol
                        profiles
INVENTOR(S):
                        Norris, Susan R.; Lincoln, Kim; Stein, Joshua C.;
                        Valentin, Henry E.; Van Eenennaam, Alison
PATENT ASSIGNEE(S):
                        USA
                        U.S. Pat. Appl. Publ., 149 pp.
SOURCE:
                        CODEN: USXXCO
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        English
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
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                                          US 2002-279029
    US 2003150015
                        A1
                                                                 20021024
    WO 2003034812
                               20030501
                                         WO 2002-US34079
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                        A3
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     EP 1444348
                         A2
                             20040811 EP 2002-776280
                                                                   20021024
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PRIORITY APPLN. INFO.:
                                           US 2001-330563P
                                           WO 2002-US34079
```

AB A gene involved in the methylation of tocopherols is identified in Arabidopsis thaliana and sequence homologs are identified in other plants. The gene may be useful in altering patterns of tocopherol biosynthesis in plants in the generation of novel secondary metabolites (no data.). More particularly, the present invention provides and includes nucleic acid mols., proteins, and antibodies associated with genes that encode polypeptides that have methyltransferase activity in the synthesis of tocopherols, such as γ -tocopherol methyltransferase and

2-methylphytylplastoquinol methyltransferase. γ -Tocopherol methyltransferase genes are provided from Arabidopsis thaliana, rice, corn, Brassica and cotton. The gene was first identified by a mutation leading to accumulation of δ -tocopherol in Arabidopsis. Expression of the cloned gene in soybean led to changes in the tocopherol profile of seeds.

L5 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:376457 . CAPLUS

DOCUMENT NUMBER:

138:380481

TITLE:

Sequences of soybean seed specific $7S\alpha$ promoters

and use for expressing genes in plants

INVENTOR(S):

Wang, Qi; Dubois, Patrice

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 38 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| F | PATENT NO. | | | | | KIN | D | DATE | | | | | | | | DATE | | | |
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| Ţ | JS | 2003 | 0938 | 28 | | A1 | _ | 2003 | | | US 2 | 002- | 2356 | 18 | | 2 | 00209 | 905 | |
| V | OV | 2003 | 0200 | 16 | | A2 | | 2003 | 0313 | | WO 2 | 002-1 | US30: | 374 | | 2 | 00209 | 905 | |
| V | OV | 2003 | 0200 | 16 | | A3 | | 2004 | 0506 | | | | | | | | | | |
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| | | | | | | | | SE, | | | | | | | | | | | |
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| | | | FI, | FR, | GB, | GR, | IE, | IT, | LU, | MC, | NL, | PT, | SE, | SK, | TR. | BF. | ВJ. | CF. | |
| | | | | | | | | GQ, | | | , | | | | • | , | | - / | |
| E | ΞP | 1440 | | • | • | | | 2004 | | , | • | | | • | | 20 | 00209 | 905 | |
| | | R: | AT, | BE. | CH. | DE. | DK. | ES, | FR. | GB. | GR. | IT. | LI. | LU. | NL. | SE. | MC. | PT. | |
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| PRIORI | PRIORITY APPLN. INFO.: | | | | | - , | / | 1, 10, 111, | | T, CY, AL, TR, BG, CZ,
US 2001-316975P | | | | | • | · · | | | |
| | | | | | . • | | | | | | | 002-1 | | | | _ | 00209 | | |
| | | | | | | | | | | | | | | | • | | | | |

AB This invention provides sequences of soybean seed specific 7Sα promoters capable of transcribing heterologous nucleic acid sequences in seeds, and methods of modifying, producing, and using the promoter for expressing genes in plants. The invention also provides compns., transformed host cells, transgenic plants, and seeds containing the high-expression promoters, and methods for preparing

and seeds containing the high-expression promoters, and methods for praint

using the same.

L5 ANSWER 4 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:154561 CAPLUS

DOCUMENT NUMBER:

138:200982

TITLE:

Plant genes encoding methyltransferase

products involved in tocopherol biosynthesis and their

use in **transforming plants** for modified tocopherol composition

INVENTOR(S):

Van Eenennaam, Alison; Valentin, Henry E.;

Karunanandaa, Balasulojini; Hao, Ming; Aasen, Eric;

Levering, Charlene

PATENT ASSIGNEE(S):

Monsanto Technology LLC, USA

SOURCE:

PCT Int. Appl., 218 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

OCUMENT TYPE:

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

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PATENT INFORMATION:

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PATENT NO.
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     WO 2003016482
                          A2
                                             WO 2002-US26047
                                 20030227
                                                                      20020816
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                          Α3
                                 20040219
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PRIORITY APPLN. INFO.:
                                             US 2001-312758P
                                                                  W 20020816
                                             WO 2002-US26047
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AB The present invention relates to genes associated with the tocopherol biosynthesis pathway. More particularly, the present invention provides and includes nucleic acid mols., proteins, and antibodies associated with genes that encode polypeptides that have methyltransferase activity in the synthesis of tocopherols, such as γ -tocopherol methyltransferase and 2-methyl-6-phytylplastoquinol/2-methyl-6-solanylplastoquinol-9 methyltransferase. γ -Tocopherol methyltransferase genes are provided from Arabidopsis thaliana, Oryza sativa, Zea mays, Gossypium hirsutum, Cuphea pulcherrima, Brassica napus, Lycopersicon esculentum, Glycine max, Tagetes erecta, and Lilium asiaticum. Homologs previously identified as $\Delta 24$ -sterol C-methyltransferase (EC 2.1.1.41) are also identified in cyanobacteria (Anabaena, Synechocystis, Nostoc punctiforme) and Prochlorococcus marinus. The present invention also provides methods for utilizing such agents, for example in gene isolation, gene anal. and the production of transgenic plants. Moreover, the present invention includes transgenic plants modified to express the aforementioned polypeptides. In addition, the present invention includes methods for the production of products from the tocopherol biosynthesis pathway.

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L5 ANSWER 5 OF 5 CAPLUS COPYRIGHT 2004 ACS on STN
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ACCESSION NUMBER:

2002:868650 CAPLUS

DOCUMENT NUMBER:

137:364394

TITLE:

Generation of transgenic plants with

enhanced tocopherol concentrations by cloning

microbial gene tyrA

INVENTOR(S):

Valentin, Henry E.; Mitsky, Timothy A.

PATENT ASSIGNEE(S): Monsanto Technology LLC, USA

SOURCE:

PCT Int. Appl., 206 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 2

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2002089561 | A1 | 20021114 | WO 2002-US13898 | 20020503 |
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                                      20040706
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PRIORITY APPLN. INFO.:
                                                     US 2001-289527P
                                                                                20010509
                                                                             W 20020503
                                                     WO 2002-US13898
      The present invention is in the field of plant genetics and
AΒ
      biochem. More specifically, the invention relates to genes associated with
      the tocopherol biosynthesis pathway. The present invention provides and
      includes nucleic acid mols., proteins, and antibodies associated with the
      genes of the tocopherol biosynthesis pathway. The present invention also
      provides methods for utilizing such agents, for example in gene isolation,
      gene anal. and the production of transgenic plants. Moreover, the
      present invention includes transgenic plants modified to express
     proteins associated with the tocopherol pathway. In addition, the present
      invention includes methods for the production of products from the tocopherol
      biosynthesis pathway. Thus, Arabidopsis thaliana transformed
      with gene tyrA and other tocopherol biosynthesis genes produced
      significantly higher levels of tocotrienols and tocopherols when compared
      to the untransformed plant.
                                     THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                              6
                                     RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
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     ANSWER 1 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                              2004:120971 CAPLUS
DOCUMENT NUMBER:
                              140:177318
TITLE:
                              Plant genes for sequence homologs of phytol
                              kinase of tocopherol biosynthesis and their use in
                              engineering plant tocopherol profiles and
                              drought resistance
INVENTOR(S):
                              Norris, Susan R.; Lincoln, Kim; Abad, Mark Scott;
```

Eilers, Robert; Hartsuyker, Karen Kindle; Hirschberg, Joseph; Karunanandaa, Balasulojini; Moshiri, Farhad; Stein, Joshua C.; Valentin, Henry E.; Venkatesh,

Tyamagondlu V.

PATENT ASSIGNEE(S):

Monsanto Technology, Llc, USA; et al.

PCT Int. Appl., 189 pp. CODEN: PIXXD2

DOCUMENT TYPE:

SOURCE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

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PRIORITY APPLN. INFO.:
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     ANSWER 2 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:
                              2003:154561 CAPLUS
DOCUMENT NUMBER:
                              138:200982
TITLE:
                              Plant genes encoding methyltransferase
                              products involved in tocopherol biosynthesis and their
                              use in transforming plants for
                              modified tocopherol composition
                              Van Eenennaam, Alison; Valentin, Henry E.;
INVENTOR(S):
                              Karunanandaa, Balasulojini; Hao, Ming; Aasen, Eric;
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Levering, Charlene

PATENT ASSIGNEE(S):

Monsanto Technology LLC, USA

PCT Int. Appl., 218 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

SOURCE:

English

TETATO

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION: DATEDNIE NO

| PATENT NO. | | | | | | KIND DATE | | | APPLICATION NO. | | | | | | DATE | | | |
|------------|------|------|------|-----|-----|-----------|-----|------|-----------------|-----|-------|-------|------|-------|------|-----|-------|-----|
| | | | | | | | - | | | | | | | | | . – | | |
| | WO | 2003 | 0164 | 82 | • | A2 | | 2003 | 0227 | 1 | WO 2 | 002-1 | US26 | 047 | | 2 | 0020 | 816 |
| | WO | 2003 | 0164 | 82 | | A3 | | 2004 | 0219 | | | | | | | | | |
| | | W: | ΑE, | AG, | ΑL, | AM, | ΑT, | ΑU, | AZ, | BA, | BB, | BG, | BR, | BY, | ΒZ, | CA, | CH, | CN, |
| | | | CO, | CR, | CU, | CZ, | DE, | DK, | DM, | DZ, | EC, | EE, | ES, | FΙ, | GB, | GD, | GE, | GH, |
| | | | GM, | HR, | HU, | ID, | IL, | IN, | IS, | JP, | KE, | KG, | ΚP, | KR, | KΖ, | LC, | LK, | LR, |
| | | | LS, | LT, | LU, | LV, | MA, | MD, | MG, | MK, | MN, | MW, | MX, | MΖ, | NO, | NZ, | OM, | PH, |
| | | | | | | | | SE, | | | | | | | | | | |
| | | | UA, | UG, | UZ, | VC, | VN, | YU, | ZA, | ZM, | ZW, | AM, | AZ, | BY, | KG, | KZ, | MD, | RU, |
| | | | TJ, | | | | | | | | | | | · | • | • | , | • |
| | | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW, | AT, | BE, | BG, |
| | | | CH, | CY, | CZ, | DE, | DK, | EE, | ES, | FΙ, | FR, | GB, | GR, | IE, | IT, | LU, | MC. | NL. |
| | | | | | | | | ВJ, | | • | | | | | | | | • |
| | | | | SN, | | | · | • | • | • | • | • | • | , | | - , | , | , |
| | US | 2003 | 1545 | 13 | | A1 | | 2003 | 0814 | 1 | US 2 | 002- | 2198 | 10 | | 20 | 00208 | 816 |
| | EΡ | 1427 | 832 | | | A2 | | 2004 | 0616 |] | EP 20 | 002- | 7660 | 04 | | 2 | 00208 | 816 |
| | | R: | AT, | BE, | CH, | DE. | DK, | ES, | FR. | GB. | GR. | IT. | LI. | LU. | NL. | SE. | MC. | PT. |
| | | | | | | | | RO, | | | | | | | | | , | , |
| PRIO | RITY | APP | | | | | -, | , | , | | - | | | | , | | 00108 | 817 |
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ANSWER 3 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:610132 CAPLUS

DOCUMENT NUMBER:

139:175849

TITLE:

Plant genes for sequence homologs of

methyltransferases of tocopherol biosynthesis and

their use in engineering plant tocopherol

profiles

INVENTOR(S):

Norris, Susan R.; Lincoln, Kim; Stein, Joshua C.;

Valentin, Henry E.; Van Eenennaam, Alison

PATENT ASSIGNEE(S):

SOURCE:

U.S. Pat. Appl. Publ., 149 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

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PATENT NO.
                        KIND DATE
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                               _____
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                         A1
                               20030807
                                          US 2002-279029
    US 2003150015
                                                                 20021024
                                          WO 2002-US34079
    WO 2003034812
                         A2
                               20030501
                                                                 20021024
    WO 2003034812
                               20040226
                         Α3
        W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
            CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
            GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
            LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
            PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
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                        A2 20040811 EP 2002-776280
                                                                 20021024
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK
                                          US 2001-330563P
PRIORITY APPLN: INFO .:
                                                           P 20011025
                                          WO 2002-US34079
                                                             W 20021024
```

L2 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:376457 CAPLUS

DOCUMENT NUMBER:

138:380481

TITLE:

Sequences of soybean seed specific $7S\alpha$ promoters

and use for expressing genes in plants

INVENTOR(S):

Wang, Qi; Dubois, Patrice

PATENT ASSIGNEE(S):

USA

SOURCE:

U.S. Pat. Appl. Publ., 38 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

| | TENT | | | | KIN | D | DATE | | | APPL | ICAT | ION | NO. | | D. | ATE | |
|----------|------|------|-----|-----|-----|-----|------|------|-----|----------|-------|----------|-----|-----|-----|------|-----|
| | 2003 | | | | A1 | _ | 2003 | 0515 | |
US 2 | 002- |
2356 | 18 | | 2 | 0020 | 905 |
| WO | 2003 | 0200 | 16 | | A2 | | 2003 | 0313 | | WO 2 | 002- | US30 | 374 | | 2 | 0020 | 905 |
| WO | 2003 | 0200 | 16 | | А3 | | 2004 | 0506 | | | | | | | | | |
| | W: | ΑE, | AG, | AL, | AM, | AT, | AU, | AZ, | BA, | BB, | BG, | BR, | BY, | BZ, | CA, | CH. | CN. |
| | | | | | | | DK, | | | | | | | | | | |
| | | | | | | | IN, | | | | | | | | | | |
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| | RW: | GH, | GM, | KE, | LS, | MW, | MZ, | SD, | SL, | SZ, | TZ, | UG, | ZM, | ZW. | AM, | AZ. | BY. |
| | | | | | | | TM, | | | | | | | | | | |
| | | | | | | | IT, | | | | | | | | | | |
| | | | | | | | GQ, | | | | | | | | , | , | |
| EP | 1440 | | | | | | | | | | | | | | 20 | 0020 | 905 |
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| | | | | | | | RO, | | | | | | | | | , | , |
| PRIORITY | APP | | | | | | | | | | 001- | | | | | 0010 | 905 |
| | | | | | | | | | | | 002-1 | | | | | 0020 | |
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L2 ANSWER 5 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 1

ACCESSION NUMBER:

2003:433121 BIOSIS

DOCUMENT NUMBER:

PREV200300433121

TITLE:

Scale-up of Artemisia annua L. hairy root cultures produces

complex patterns of terpenoid gene expression.

AUTHOR(S):

Souret, Frederic F.; Kim, Yoojeong; Wyslouzil, Barbara E.;

Wobbe, Kristin K.; Weathers, Pamela J. [Reprint Author]

CORPORATE SOURCE: Department of Biology and Biotechnology, Worcester

Polytechnic Institute, Worcester, MA, 01609, USA

weathers@wpi.edu

Biotechnology and Bioengineering, (September 20 2003) Vol. SOURCE:

> 83, No. 6, pp. 653-667. print. CODEN: BIBIAU. ISSN: 0006-3592.

DOCUMENT TYPE: Article

English LANGUAGE:

ENTRY DATE: Entered STN: 17 Sep 2003

Last Updated on STN: 17 Sep 2003

=> d 12 7-12 ti

ANSWER 7 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

Generation of transgenic plants with enhanced tocopherol concentrations by cloning microbial gene tyrA

- ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN L2
- TICarotenoid production from a single carbon substrate
- ANSWER 9 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
- 1-Deoxy-D-xylulose 5-phosphate synthase, the gene product of open reading TIframe (ORF) 2816 and ORF 2895 in Rhodobacter capsulatus
- ANSWER 10 OF 12 AGRICOLA Compiled and distributed by the National L2Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2004) on STN
- TISilencing of HMW glutenins in transgenic wheat expressing extra HMW subunits.
- L2ANSWER 11 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation.
- TΙ Terpenoid biosynthesis via a non mevalonic acid pathway in transformed roots of Artemisia annua L.: Cloning and expression of DXS and DXR.
- ANSWER 12 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. L2
- THE SIMULTANEOUS ANTAGONISTIC EFFECTS OF A T CELL HYBRIDOMA PRODUCT ON THE TIGROWTH AND THE MATURATION OF ACTIVATED LYMPHOCYTES.

=> d 12 8 11 ibib ab

ANSWER 8 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:172119 CAPLUS

DOCUMENT NUMBER:

136:231339

INVENTOR(S):

TITLE:

Carotenoid production from a single carbon substrate Brzostowicz, Patricia C.; Cheng, Qiong; Dicosimo, Deana J.; Koffas, Mattheos; Miller, Edward S.; Odom, J. Martin; Picataggio, Stephen K.; Rouviere, Pierre E.

E. I. Du Pont de Nemours & Co., USA

PATENT ASSIGNEE(S): SOURCE:

PCT Int. Appl., 156 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

PATENT NO. KIND DATE APPLICATION NO. DATE

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WO 2002018617
                            Α2
                                   20020307
                                                WO 2001-US27420
                                                                         20010904
     WO 2002018617
                            Α3
                                   20030522
             PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
                                                US 2001-938956
     US 2002142408
                            Α1
                                   20021003
                                                                         20010824
                                                US 2001-941947
     US 2003003528
                            A1
                                   20030102
                                                                         20010829
                                                AU 2001-88699
     AU 2001088699
                            Α5
                                   20020313
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                                                EP 2001-968453
     EP 1328639
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                                   20030723
                                                                         20010904
              AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
              IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
     NO 2003000343
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                                   20030403
                                                NO 2003-343
                                                                          20030123
                                                US 2003-363567
     US 2004077068
                            Α1
                                   20040422
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     US 2004063143
                                                US 2003-700003
                            A1
                                   20040401
                                                                          20031103
     US 2004147011
                                   20040729
                                                US 2003-701200
                            Α1
                                                                          20031104
                                                                      P 20000901
PRIORITY APPLN. INFO.:
                                                US 2000-229858P
                                                                      P 20000901
                                                US 2000-229907P
                                                US 2001-934868
                                                                      A3 20010822
                                                US 2001-934903
                                                                      A3 20010822
                                                WO 2001-US27420
                                                                      W 20010904
AB
     A method for the production of carotenoid compds. is disclosed. The method
     relies on the use of microorganisms which metabolize single carbon
     substrates for the production of carotenoid compds. in high yields.
     Methylomonas strain 16a was genetically enhanced to produce
     \beta-carotene and zeaxanthin from methane.
     ANSWER 11 OF 12 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation.
L_2
     STN
ACCESSION NUMBER:
                      2000:339747 BIOSIS
DOCUMENT NUMBER:
                      PREV200000339747
TITLE:
                      Terpenoid biosynthesis via a non mevalonic acid pathway in
                      transformed roots of Artemisia annua L.: Cloning
                      and expression of DXS and DXR.
AUTHOR(S):
                      Souret, F. F. [Reprint author]; Wobbe, K. K.; Weathers, P.
                      J. [Reprint author]
CORPORATE SOURCE:
                      Dept. of Biology/Biotechnology, Worcester Polytechnic
                      Institute, Worcester, MA, 01609, USA
SOURCE:
                      In Vitro Cellular and Developmental Biology Animal, (March,
                      2000) Vol. 36, No. 3 Part 2, pp. 61.A. print.
                      Meeting Info.: Meeting of the Society for In Vitro Biology
                      World Congress on In Vitro Biology. San Diego, California,
                      USA. June 10-15, 2000.
                      ISSN: 1071-2690.
DOCUMENT TYPE:
                      Conference; (Meeting)
                      Conference; Abstract; (Meeting Abstract)
                      Conference; (Meeting Poster)
LANGUAGE:
                      English
ENTRY DATE:
                      Entered STN: 10 Aug 2000
                      Last Updated on STN: 7 Jan 2002
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              0 DXOS AND PLANT AND TRANSFORM?
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=> d 18 ti

L8 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN

TI Involvement of the Arabidopsis $\alpha\text{-DOX1}$ fatty acid dioxygenase in protection against oxidative stress and cell death

=> d 12 6 ti

L2 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

TI Metabolic engineering of the mevalonate and non-mevalonate pathways in tomato

=> d 12 6 ibib

L2 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2003:744567 CAPLUS

DOCUMENT NUMBER:

140:400936

TITLE:

Metabolic engineering of the mevalonate and

non-mevalonate pathways in tomato

AUTHOR (S):

Enfissi, E. M.; Fraser, P. D.; Lois, L. M.; Boronat,

A.; Schuch, W.; Bramley, P. M.

CORPORATE SOURCE:

School of Biological Sciences, Royal Holloway,

University of London, Egham, Surrey, TW20 0EX, UK Advanced Research on Plant Lipids, Proceedings of the

SOURCE:

International Symposium on Plant Lipids, 15th,

Okazaki, Japan, May 12-17, 2002 (2003), Meeting Date 2002, 237-240. Editor(s): Murata, Norio. Kluwer

Academic Publishers: Dordrecht, Neth. CODEN: 69ENJ3; ISBN: 1-4020-1105-9

DOCUMENT TYPE:

Conference

LANGUAGE:

English

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d 14 1-10 ti

- L4 ANSWER 1 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN
- TI Chimeric hydroxyl-phenyl pyruvate dioxygenase, DNA sequence and method for obtaining plants containing such a gene, with herbicide tolerance.
- L4 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- TI **Plant** genes for sequence homologs of phytol kinase of tocopherol biosynthesis and their use in engineering **plant** tocopherol profiles and drought resistance
- L4 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- TI **Transformed plants** with biosynthesis of improved prenylquinones
- L4 ANSWER 4 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STN DUPLICATE 1
- TI The crystal structures of Zea mays and Arabidopsis 4-hydroxyphenylpyruvate dioxygenase.
- L4 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- TI **Plant** genes encoding methyltransferase products involved in tocopherol biosynthesis and their use in **transforming**

plants for modified tocopherol composition

- ANSWER 6 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Plant genes for sequence homologs of methyltransferases of TI tocopherol biosynthesis and their use in engineering plant tocopherol profiles
- ANSWER 7 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN L4
- Sequences of soybean seed specific $7S\alpha$ promoters and use for expressing genes in plants
- L4ANSWER 8 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
- TIGeneration of transgenic plants with enhanced tocopherol concentrations by cloning microbial gene tyrA
- ANSWER 9 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN L4
- TIUse of hydroxyphenylpyruvate dioxygenase inhibitors as selection agents in plant transformation
- ANSWER 10 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. L4DUPLICATE 2
- TI cDNA-cloning and functional expression of hydroxyphenylpyruvate dioxygenase from cell suspension cultures of Coleus blumei.

=> d 14 10 ibib ab

ANSWER 10 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on STNDUPLICATE 2

ACCESSION NUMBER:

2003:68888 BIOSIS

DOCUMENT NUMBER:

PREV200300068888

TITLE:

cDNA-cloning and functional expression of

hydroxyphenylpyruvate dioxygenase from cell suspension

cultures of Coleus blumei.

AUTHOR(S):

Kim, Kyung Hee; Petersen, Maike [Reprint Author]

CORPORATE SOURCE:

Institut fuer Pharmazeutische Biologie,

Philipps-Universitaet Marburg, Deutschhausstr. 17 A,

D-35037, Marburg, Germany

petersen@mailer.uni-marburg.de

SOURCE:

Plant Science (Oxford), (November 2002) Vol. 163, No. 5,

pp. 1001-1009. print.

ISSN: 0168-9452 (ISSN print).

DOCUMENT TYPE:

Article

LANGUAGE:

English

ENTRY DATE:

Entered STN: 29 Jan 2003

Last Updated on STN: 29 Jan 2003

The full-length cDNA of hydroxyphenylpyruvate dioxygenase (HPPD; AB E.C. 1.13.11.27) was cloned from Coleus blumei (Lamiaceae) by polymerase chain reaction with primer sequences deduced from already known HPPDs. The cloned cDNA had a length of 1657 base pairs containing an open reading frame (ORF) of 1308 base pairs which coded for a protein of 436 amino acid residues with a calculated molecular mass of 47 736 Da. Identities of 62.7-76.0% on amino acid level and 64.8-74.9% on nucleotide level were shown to HPPDs from other plant sources. HPPD transforms 4-hydroxyphenylpyruvate to homogentisate and, therefore, competes for the same substrate as hydroxyphenylpyruvate reductase (HPPR), an enzyme of rosmarinic acid (RA) biosynthesis from C. blumei. The ORF of HPPD was ligated into the expression vector pTrc99A and transferred into Escherichia coli DH5alpha. HPPD was functionally expressed after induction with isopropyl-beta-Dthiogalactoside (IPTG). Highest specific activities of HPPD were observed in bacterial protein extracts 5 h after induction. At the same time point the highest homogentisate concentration (110 nmol/ml) was measured in the cell-free media. The excretion of homogentisate was

accompanied by a successive browning of the medium due to the formation of oxidation and polymerization products of homogentisate. The enzyme characteristics of the heterologously expressed C. blumei HPPD were determined.

=> d 14 20 ibib ab

NOTE:

ANSWER 20 OF 20 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved.

(2004) on STN

2004:20529 AGRICOLA ACCESSION NUMBER:

DOCUMENT NUMBER: IND43624802

The crystal structures of Zea mays and Arabidopsis TITLE:

4-hydroxyphenylpyruvate dioxygenase.

AUTHOR(S): Fritze, I.M.; Linden, L.; Freigang, J.; Auerbach, G.;

Huber, R.; Steinbacher, S.

DNAL (450 P692) AVAILABILITY:

SOURCE: Plant physiology, p. 1388-1400

> ISSN: 0032-0889 Includes references Article; Conference

DOCUMENT TYPE: Other US FILE SEGMENT: English

LANGUAGE: The transformation of 4-hydroxyphenylpyruvate to homogentisate, catalyzed by 4-hydroxyphenylpyruvate dioxygenase (HPPD), plays an important role in degrading aromatic amino acids. As the reaction product homogentisate serves as aromatic precursor for prenylquinone synthesis in plants, the enzyme is an interesting target for herbicides. In this study we report the first x-ray structures of the plant HPPDs of Zea mays and Arabidopsis in their substrate-free form at 2.0 angstrom and 3.0 angstrom resolution, respectively. Previous biochemical characterizations have demonstrated that eukaryotic enzymes behave as homodimers in contrast to prokaryotic HPPDs, which are homotetramers. Plant and bacterial enzymes share the overall fold but use orthogonal surfaces for oligomerization. In addition, comparison of both structures provides direct evidence that the C-terminal helix gates substrate access to the active site around a nonheme ferrous iron center. In the Z. mays HPPD structure this helix packs into the active site, sequestering it completely from the solvent. In contrast, in the Arabidopsis structure this helix tilted by about 60(degree) into the solvent and leaves the active site fully accessible. By elucidating the structure of plant HPPD enzymes we aim to provide a structural basis for the development of new herbicides.

=> d 14 1 ibib

ANSWER 1 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. on

ACCESSION NUMBER: 2004:339439 BIOSIS DOCUMENT NUMBER: PREV200400344924

TITLE: Chimeric hydroxyl-phenyl pyruvate dioxygenase, DNA sequence

and method for obtaining plants containing such a

gene, with herbicide tolerance.

AUTHOR(S): Boudec, Philippe [Inventor, Reprint Author]; Bourdon,

Helene [Inventor]; Dumas, Florence [Inventor]; Rodgers,

i

Matthew [Inventor]; Sailland, Alain [Inventor]

Lyons, France CORPORATE SOURCE:

ASSIGNEE: Bayer CropScience SA, Lyons, France

PATENT INFORMATION: US 6768044 July 27, 2004

Official Gazette of the United States Patent and Trademark SOURCE:

Office Patents, (July 27 2004) Vol. 1284, No. 4. http://www.uspto.gov/web/menu/patdata.html. e-file.

ISSN: 0098-1133 (ISSN print).

DOCUMENT TYPE:

Patent English

LANGUAGE: ENTRY DATE:

Entered STN: 11 Aug 2004

Last Updated on STN: 11 Aug 2004

=> d l4 11-15 ibib

ANSWER 11 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:894133 CAPLUS

DOCUMENT NUMBER:

138:300477

TITLE:

Overexpression of the enzyme p-hydroxyphenolpyruvate dioxygenase in Arabidopsis and its relation to

tocopherol biosynthesis

AUTHOR(S):

Tsegaye, Yoseph; Shintani, David K.; DellaPenna, Dean

CORPORATE SOURCE:

Department of Biochemistry/MS200, University of

Nevada, Reno, NV, 89557, USA

SOURCE:

Plant Physiology and Biochemistry (Paris, France)

(2002), 40(11), 913-920

CODEN: PPBIEX; ISSN: 0981-9428

PUBLISHER:

Editions Scientifiques et Medicales Elsevier

DOCUMENT TYPE:

Journal

LANGUAGE:

English

REFERENCE COUNT:

THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS 2.9 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 12 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2002:88852 CAPLUS 136:243262

DOCUMENT NUMBER: TITLE:

Mesotrione: Mechanism of herbicidal activity and

selectivity in corn

AUTHOR(S):

Hawkes, T. R.; Holt, D. C.; Andrews, C. J.; Thomas, P.

G.; Langford, M. P.; Hollingworth, S.; Mitchell, G.

CORPORATE SOURCE:

Jealott's Hill International Research Centre,

Syngenta, Bracknell, RG42 6EY, UK

SOURCE:

BCPC Conference--Weeds (2001), (Vol. 2), 563-568

CODEN: BCCOBC

PUBLISHER:

British Crop Protection Council

DOCUMENT TYPE:

Journal

LANGUAGE:

English

REFERENCE COUNT:

THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 13 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2001:543076 CAPLUS

DOCUMENT NUMBER:

135:176638

TITLE:

From inhibitors to target site genes and

beyond-herbicidal inhibitors as powerful tools for

functional genomics

AUTHOR(S):

Zhen, Rui-Guang; Singh, Bijay K.

CORPORATE SOURCE:

BASF Plant Science, BASF Corporation, Princeton, NJ,

08543-0400, USA

SOURCE:

Weed Science (2001), 49(2), 266-272

CODEN: WEESA6; ISSN: 0043-1745

PUBLISHER:

Weed Science Society of America

DOCUMENT TYPE:

Journal; General Review

LANGUAGE:

English

REFERENCE COUNT:

41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

T.4 ANSWER 14 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation. STN DUPLICATE 3

ACCESSION NUMBER:

CORPORATE SOURCE:

2000:392892 BIOSIS

DOCUMENT NUMBER:

PREV200000392892

TITLE:

Combined use of 13C- and 19F-NMR to analyse the mode of action and the metabolism of the herbicide isoxaflutole.

AUTHOR(S):

Aubert, Serge [Reprint author]; Pallett, Kenneth E. DBMS-PCV, CEA-Grenoble, 17, rue des Martyrs, 38054,

Grenoble cedex, 9, France

SOURCE:

Plant Physiology and Biochemistry (Paris), (June, 2000)

Vol. 38, No. 6, pp. 517-523. print.

CODEN: PPBIEX. ISSN: 0981-9428.

DOCUMENT TYPE:

Article

LANGUAGE:

English

ENTRY DATE:

Entered STN: 13 Sep 2000

Last Updated on STN: 8 Jan 2002

L4 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1999:350752 CAPLUS

DOCUMENT NUMBER:

131:1430

TITLE:

Chimeric light-dependent promoter

hydroxyphenylpyruvate dioxygenase gene and transgenic

herbicide-resistant.plants

INVENTOR(S):

Reygnier, Luc; Sailland, Alain

PATENT ASSIGNEE(S):

Rhone Poulenc Agro, Fr. PCT Int. Appl., 20 pp.

SOURCE:

CODEN: PIXXD2

DOCUMENT TYPE:

LANGUAGE:

Patent French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| | | | | | | | | APPLICATION NO. | | | | | | | | | | |
|---------|-------|--------|------|-----|------------|--------------|------|-----------------|------|-------|-------|-------|-------|-------|-------|-------|-------|-----|
| | | 5842 | | | | | | | | | | | | | | 9981 | 113 | |
| | | AL, | | | | | | | | | | | | | | | | |
| | | IL, | IS, | JP, | ΚP, | KR, | KZ, | LK, | LR, | LT, | LV, | MG, | MK, | MN, | MX, | NO, | NZ, | |
| | | PL, | RO, | RU, | SG, | SI, | SK, | SL, | TR, | ΤТ, | UA, | UZ, | VN, | YU, | AM, | ΑZ, | BY, | |
| | | KG, | KΖ, | MD, | RU, | TJ, | TM | | | | | | | | | | | |
| | RW | : GH, | GM, | KE, | LS, | MW, | SD, | SZ, | UG, | ZW, | AT, | BE, | CH, | CY, | DE, | DK, | ES, | |
| | | FI, | FR, | GB, | GR, | IE, | ΙT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, | |
| | | CM, | GA, | GN, | GW, | ML, | MR, | NE, | SN, | TD, | TG | | | | | | | |
| FF | 277 | 1104 | | | A 1 | | 1999 | 0521 | | FR 19 | 997- | 1459 | 1 | | 1: | 9971 | 117 | |
| FF | 277 | 1104 | | | В1 | | 2000 | 1208 | | | | | | | | | | |
| CF | 230 | 9880 | | | AA | | 1999 | 0527 | | CA 19 | 998-: | 23098 | 880 | | 1: | 9981 | 113 | |
| Αl | J 991 | 1628 | | | A1 | | 1999 | 0607 | | AU 19 | 999- | 11628 | 8 | | 1: | 9981 | 113 | |
| JA | J 747 | 634 | | | В2 | | 2002 | 0516 | | | | | | | | | | |
| EH | 103 | 2681 | | | A1 | | 2000 | 0906 | | EP 19 | 998- | 9545 | 65 | | 1 | 9981 | 113 | |
| | R: | AT, | BE, | CH, | DE, | DK, | ES, | FR, | GB, | GR, | IT, | LI, | LU, | ΝL, | SE, | PT, | ΙE, | FΙ |
| BF | 981 | 5628 | | | A | | 2000 | 1024 | | 3R 19 | 998- | 15628 | 8 | | 19 | 9981 | 113 | |
| PRIORIT | Y AP | PLN. | INFO | . : | | | | | | FR 19 | 997- | 1459 | 1 | Ž | A 19 | 9971 | 117 | |
| | | | | | | | | | 1 | WO 19 | 998-1 | FR24 | 14 | I | W 19 | 9981: | 113 | |
| REFEREN | ICE C | : TNUO | | | 4 | \mathbf{T} | HERE | ARE | 4 C | ITED | REF | EREN | CES A | AVAI | LABLI | E FOI | R TH. | [S |
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L4 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

1999:350752 CAPLUS

DOCUMENT NUMBER:

131:1430

TITLE:

Chimeric light-dependent promoter

hydroxyphenylpyruvate dioxygenase gene and transgenic

herbicide-resistant plants

INVENTOR(S):

Reygnier, Luc; Sailland, Alain

PATENT ASSIGNEE(S):

Rhone Poulenc Agro, Fr.

SOURCE:

PCT Int. Appl., 20 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent French

LANGUAGE:

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

APPLICATION NO. PATENT NO. KIND DATE DATE _____ _____ _ _ _ _ _____ -----A1 19990527 WO 1998-FR2414 WO 9925842 19981113 W: AL, AU, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, HR, HU, ID, IL, IS, JP, KP, KR, KZ, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG FR 2771104 A1 19990521 FR 1997-14591 19971117 FR 2771104 R1 20001208 CA 2309880 AA19990527 CA 1998-2309880 19981113 AU 1999-11628 AU 9911628 Δ1 19990607 19981113 AU 747634 B2 20020516 EP 1032681 20000906 EP 1998-954565 A1 19981113 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI BR 1998-15628 19981113 BR 9815628 A 20001024 PRIORITY APPLN. INFO.: FR 1997-14591 A 19971117

WO 1998-FR2414 REFERENCE COUNT: THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

ANSWER 16 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

1999:326059 CAPLUS

TITLE:

130:349039

A herbicide-resistant 4-hydroxyphenyl pyruvate dioxygenase and the gene encoding it and the development of herbicide-tolerant transgenic

plants

INVENTOR(S):

Boudec, Philippe; Bourdon, Helene; Dumas, Florence;

W 19981113

Rodgers, Matthew; Sailland, Alain

PATENT ASSIGNEE(S): SOURCE:

Rhone-Poulenc Agro, Fr. PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent French

LANGUAGE: FAMILY ACC. NUM. COUNT:

| PA | PATENT NO. KIND DATE APPLICATION NO. | | | | | | | | DATE | | | | | | | | |
|----|--------------------------------------|-----|-----|-----|-----|-----|------|------|------|-------|-------|-----------|--------|-----|-----|-------|-----|
| WO | 9924 | 585 | | | A1 | _ | 1999 | 0520 | | WO 1. | 998- |
FR23' |
74 | | 1: | 99811 | 106 |
| | W: | AL, | AU, | BA, | BB, | BG, | BR, | CA, | CN, | CU, | CZ, | EE, | GE, | HR, | HU, | ID, | IL, |
| | | IS, | JP, | ΚP, | KR, | LK, | LR, | LT, | LV, | MG, | MK, | MN, | MX, | NO, | NZ, | PL, | RO, |
| | | SG, | SI, | SK, | SL, | TR, | TT, | UA, | UZ, | VN, | YU, | AM, | ΑZ, | BY, | KG, | KΖ, | MD, |
| | | RU, | TJ, | TM | | | | | | | | | | | | | |
| | RW: | GH, | GM, | KΕ, | LS, | MW, | SD, | SZ, | UG, | ZW, | ΑT, | BE, | CH, | CY, | DE, | DK, | ES, |
| | | FΙ, | FR, | GB, | GR, | ΙE, | IT, | LU, | MC, | NL, | PT, | SE, | BF, | ВJ, | CF, | CG, | CI, |
| | | CM, | GA, | GN, | GW, | ML, | MR, | NΕ, | SN, | TD, | TG | | | | | | |
| FR | 2770 | 854 | | | Α1 | | 1999 | 0514 | | FR 1: | 997- | 1426 | 4 | | 1 | 9971 | 107 |
| FR | 2770 | 854 | | | В1 | | 2001 | 1130 | | | | | | | | | |
| ZA | 9810 | 076 | | | Α | | 1999 | 0507 | | ZA 1: | 998- | 1007 | 5 | | 1: | 9981 | 104 |
| CA | 2309 | 322 | | | AA | | 1999 | 0520 | | CA 1 | 998-: | 23093 | 322 | | 1: | 9981 | 106 |
| AU | 9911 | 603 | | | A1 | | 1999 | 0531 | | AU 1: | 999- | 1160 | 3 | | 1: | 9981 | 106 |
| ΑU | 7493 | 23 | | | B2 | | 2002 | 0620 | | | | | | | | | |

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A1
                              20000823 EP 1998-954530
     EP 1029059
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE. FI
     JP 2001522608
                          T2
                                20011120
                                            JP 2000-520579
                                                                   19981106
     US 6768044
                          В1
                                20040727
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                                                                   20000510
                                                                A 19971107
PRIORITY APPLN. INFO.:
                                            FR 1997-14264
                                                                W 19981106
                                            WO 1998-FR2374
                               THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                         5
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L4
     ANSWER 17 OF 20 BIOSIS COPYRIGHT (c) 2004 The Thomson Corporation.
                   2003:144239 BIOSIS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                    PREV200300144239
                    The role of two dioxygenases in regulating vitamin E
TITLE:
                    biosynthesis.
AUTHOR (S):
                    Tsegaye, Yoseph [Reprint Author]; Shintani, David [Reprint
                    Author]; DellaPenna, Dean [Reprint Author]
                   University of Nevada-Reno, Reno, NV, USA
CORPORATE SOURCE:
                    ytsegaye@med.unr.edu
                    Plant Biology (Rockville), (1999) Vol. 1999, pp. 100-101.
SOURCE:
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print.

Meeting Info.: Annual Meeting of the American Society of Plant Physiologists. Baltimore, Maryland, USA. July 24-28,

1999. American Society of Plant Physiologists (ASPP).

Conference; (Meeting) DOCUMENT TYPE:

Conference; Abstract; (Meeting Abstract)

LANGUAGE: English

Entered STN: 19 Mar 2003 ENTRY DATE:

Last Updated on STN: 19 Mar 2003

ANSWER 18 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: DOCUMENT NUMBER:

1998:106000 CAPLUS

128:176962

TITLE:

4-Hydroxyphenylpyruvate dioxygenase gene from Arabidopsis thaliana and screening for enzyme

inhibitors and herbicides

Sturner, Stephen; Hirayama, Lynne Miyo; Singh, Bijay; INVENTOR(S):

Bascomb, Newell

PATENT ASSIGNEE(S):

American Cyanamid Company, USA

SOURCE:

PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE ·

English

FAMILY ACC. NUM. COUNT:

| PATENT NO. | KIND DATE | APPLICATION NO. | DATE |
|-----------------|-----------------|---------------------|-----------------|
| WO 9804685 | A1 19980205 | WO 1997-US14351 | 19970725 |
| W: AL, AM, AT, | AU, AZ, BA, BB, | BG, BR, BY, CA, CH, | CN, CU, CZ, DE, |
| DK, EE, ES, | FI, GB, GE, HU, | IL, IS, JP, KE, KG, | KP, KR, KZ, LC, |
| LK, LR, LS, | LT, LU, LV, MD, | MG, MK, MN, MW, MX, | NO, NZ, PL, PT, |
| RO, RU, SD, | SE, SG, SI, SK, | SL, TJ, TM, TR, TT, | UA, UG, US, UZ, |
| VN, YU, ZW, | AM, AZ, BY, KG, | KZ, MD, RU, TJ, TM | |
| RW: GH, KE, LS, | MW, SD, SZ, UG, | ZW, AT, BE, CH, DE, | DK, ES, FI, FR, |
| GB, GR, IE, | IT, LU, MC, NL, | PT, SE, BF, BJ, CF, | CG, CI, CM, GA, |
| GN, ML, MR, | NE, SN, TD, TG | | • |
| CA 2262002 | AA 19980205 | CA 1997-2262002 | 19970725 |
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| R: AT, BE, CH, | DE, DK, ES, FR, | GB, GR, IT, LI, LU, | NL, SE, MC, PT, |
| IE, SI, LT, | LV, FI, RO | | |
| CN 1238008 | A 19991208 | CN 1997-198011 | 19970725 |

| US 6118050 | A | 20000912 | US | 1997-979917 | | 19970725 |
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| JP 2001500005 | T2 | 20010109 | JP | 1998-509179 | | 19970725 |
| NZ 334067 | A | 20010427 | NZ | 1997-334067 | | 19970725 |
| BR 9710751 | Α | 20020528 | BR | 1997-10751 | | 19970725 |
| NO 9900296 | A | 19990216 | NO | 1999-296 | | 19990122 |
| MX 9900939 | A | 20000331 | MΧ | 1999-939 | | 19990125 |
| AU 748196 | B2 | 20020530 | AU | 2001-23071 | | 20010216 |
| PRIORITY APPLN. INFO.: | | | US | 1996-22604P | P | 19960725 |
| | | | WO | 1997-US14351 | W | 19970725 |
| REFERENCE COUNT: | 6 | THERE ARE | S CITE | ED REFERENCES | AVAILAI | BLE FOR THIS |

ANSWER 19 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER:

2000:283444 CAPLUS

DOCUMENT NUMBER:

133:161821

TITLE:

SOURCE:

Plant p-hydroxyphenylpyruvate dioxygenase: a

target for new bleaching herbicides

AUTHOR(S):

Garcia, I.; Rodgers, M.; Pepin, R.; Hsieh, Tzung-Fu;

Matringe, M.

CORPORATE SOURCE:

Unite Mixte CNRS/Rhone-Poulenc (UMR 41), Rhone-Poulenc

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

Agrochimie, Lyon, 69263, Fr.

Photosynthesis: Mechanisms and Effects, Proceedings of

the International Congress on Photosynthesis, 11th,

Budapest, Aug. 17-22, 1998 (1998), Volume 5,

3861-3864. Editor(s): Garab, Gyozo. Kluwer Academic Publishers: Dordrecht, Neth.

CODEN: 68VVAS

DOCUMENT TYPE:

REFERENCE COUNT:

Conference

English

LANGUAGE:

THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT